

REMARKS/ARGUMENTS

1. Amendments to the Claims.

Claims 1-15, 17-32 and 34-35 remain in this application. Claims 11, 17-18 and 34-35 have been amended. Claims 16 and 33 have been cancelled. The amendments made herein add no new matter. Support for the amendments to claim 11 may be found in paragraphs [0027], [0030], and [0033], as well as Table 2. The support for the amendments to claims 17-18 and 34-35 may be found throughout the specification, particularly, in paragraphs [0006], [0008], [0011], [0022], [0027]-[0029], [0031], and [0035]-[0037].

2. Objections to the Claims Under 35 U.S.C. §112.

Claim 11 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the use of the phrase "the tetrabromobenzoate ester-containing product comprises" was objected to based on a belief that the expression presents uncertainty as to what other compounds are present. Applicants have amended claim 11 to more clearly set forth the claimed subject matter.

3. Rejections to the Claims Under 35 U.S.C. §102.

Claims 16-35 were rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 5,637,757 to Hill et al. Referring first to claims 16-18 and 33-35, the Examiner asserted that because these claims, as originally filed, were product-by-process claims, the evaluation and determination of patentability is based on the product not on the method. Accordingly, the limitations of the base method claims were not considered.

Claims 16 and 33 have been cancelled. Applicants have amended claims 17-18 and 34-35 to claim a method, rather than a product, including all of the steps of the base method claims.

The method of claims 17 and 18 require, among other things, forming a tetrabromophthalate half ester intermediate mixture and feeding the tetrabromophthalate half ester intermediate mixture and a catalyst to a heated reactor having a temperature that favors decarboxylation over esterification. Similarly, the method of claims 19-32, 34 and 35 require, among other things, feeding the starting materials to a reactor having a temperature that favors decarboxylation and containing a product mixture which includes tetrabromobenzoate. In contrast, Hill et al. discloses feeding the starting materials to a glass vessel and then heating the mixture to reflux. Hill does not disclose adding the starting materials to a vessel already heated to a decarboxylation favorable temperature. As noted in paragraph [0027] of the present application, the heating of the mixture to the decarboxylation-favorable temperatures may permit increased formation of the diester and, thus, it is more effective to feed the materials to a reaction vessel already having the favored temperature. Furthermore, Hill does not disclose adding the reactants to a vessel already containing tetrabromobenzoate ester, as required in claims 19-32, 34 and 35. As noted in the specification at paragraph [0029], the tetrabromobenzoate ester present

in the vessel may aid in the rapid heating of the reactant mixture. For these reasons, claims 19-32 and 34-35 are patentable over Hill et al. and Applicants respectfully request withdrawal of the §102 rejection of these claims.

4. Rejections to the Claims Under 35 U.S.C. §103.

Claims 1-35 were rejected under 35 U.S.C. §103 as unpatentable over Hill et al. in view of U.S. Patent No. 4,375,551 to Finley. Hill et al. is relied upon for all the limitations of claims 1-35 except the specific temperature range that favors partial esterification over complete esterification and the plurality of reactors. Finley is relied upon for these elements.

First, as discussed above, Hill et al. fails to disclose all of the limitations of independent claims 1, 17 and 19. More specifically, Hill et al. fails to disclose, teach or suggest feeding the half ester mixture to a heated reactor having a temperature that favors decarboxylation, as is required in claims 1 and 17. Similarly, Hill et al. fails to disclose, teach or suggest feeding the reactants to a reactor having a temperature that favors decarboxylation, as is required in claim 19. As previously discussed, feeding these materials to an already heated vessel permits increased formation of the diester. In contrast, both Hill et al. and Finley disclose adding the materials to a vessel and then heating the vessel and the reactants therein.

Furthermore, claims 12, 14 and 19 also require feeding the materials to a reactor already containing the tetrabromobenzoate ester. As discussed above, this process is believed to increase the formation of the benzoate ester. Neither Hill et al. nor Finley disclose, teach or suggest this limitation and, thus, no combination of Hill et al. and Finley would result in the claimed invention.

For these reasons, claims 1, 12, 14, 17 and 19, and all claims depending therefrom, are patentable over Hill et al., Finley, and any combination thereof.

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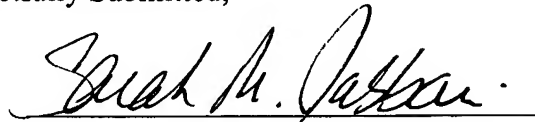
CONCLUSION

Applicant respectfully requests that action toward a Notice of Allowance be taken.

Applicant believes that no fees are due in connection with this submission, however, if any fees are necessary, please charge Deposit Account No. 02-0390, Baker & Daniels.

Respectfully Submitted,

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